

Notwithstanding any other section of

agreement to repay such bank or recognized financial institution, to convert securities issued by a LMDS licensee to equity, no party shall have any interest, direct or indirect, in more than one application for any LMDS authorization, in any single service area. Parties may have interests in more than one application so long as those applications are not for the same service area.

(b) Interests in publicly-traded corporate applications. No applicant for an LMDS authorization for any service area may have an interest, direct or indirect, in any LMDS applications, for the same service area, filed by publicly-traded corporations in which corporations that applicant owns an interest, except that ownership interests in the publicly-traded corporations of less than one percent will not be considered for purposes of this rule.

B. License Transfers And Speculative Applications

68. Suite 12 supports the Commission's proposal to prohibit the transfer of a license until such time as a system is constructed and operational. Such a rule should encourage applicants who truly intend to construct and operate a system to apply for a LMDS license, while discouraging mere speculators attempting to win a lottery and turn the win into a quick profit.

C. License Terms

69. As suggested at paragraph 40 of the Notice, Suite 12 believes that a ten-year license term would be much more appropriate than a five-year license term. First of all, as indicated above, it is unrealistic to believe that an entire system

could be constructed in three years: Suite 12 suggested above that

service, and the license term should not be an exception. A ten-year license term is necessary.

D. Form Of Applications

72. Suite 12 supports the Commission's efforts to assure that only those seriously interested in providing LMDS participate in the lottery for LMDS. Suite 12 believes that the post card method described in Paragraph 44 of the Notice would be least burdensome on the Commission's resources because the amount of paper the Commission would have to deal with would be substantially less than if lottery participants were required to file letter-perfect applications simply to participate in the lottery. If a full application was required, most of the paper the Commission received and processed would be worthless and the efforts expended to process it, even if just to conduct the lottery, would be wasted.

73. Suite 12 proposes that the Commission modify its proposal regarding the post card method by giving the following notice to those contemplating filing a post card. The notice should appear in the Report and Order concluding this proceeding and in any Public Notices or press releases associated with such a Report and Order. "Lottery participants should note that the time period for filing completed, letter-perfect applications will be very short and, therefore, lottery participants should not wait until after the lottery is held to prepare their applications." Such a notice will further the Commission's goal of ensuring that only those who are serious about providing LMDS participate in the lottery because it is likely that only those who are non-speculators will be

willing to invest the time and money necessary to prepare letter-perfect applications before they are assured that they have won the lottery.

E. Financial Showings

74 ~~With regard to the financial showings proposed in~~
[REDACTED]

unlike a cable or fiber optic system, the majority of capital expenditures to be made by a LMDS operator will be a variable cost -- the cost of the receiver and set-top tuner in the subscriber's home. The fixed costs, beyond the initial headend, are the cost of the cell site transmitters. Therefore, the Commission should rethink the traditional way it has viewed the financial showings requirement and modify its requirements to dovetail with the realities of this new technology. Failure to do so will result in only the big companies becoming LMDS providers. This does not further the Commission's often-expressed goal of achieving diversity among its licensees, particularly among those licensees who provide mass media-type services.

76. For the foregoing reasons, Suite 12 requests that the Commission modify its proposed rule section 21.1011 (a) to read as follows: "Applicants for a LMDS authorization shall demonstrate a firm financial commitment for the financing necessary to: (i) supply at least 15% of the defined GSA population within one year of the license grant; and, (ii) demonstrate the ability to operate the system serving 15% of the GSA population for one year."^{70/}

F. Filing Window


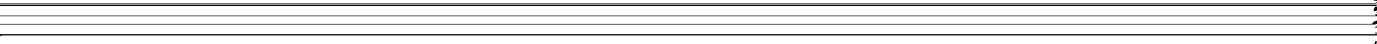
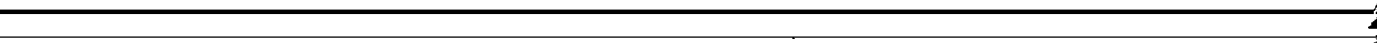
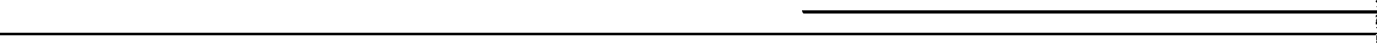







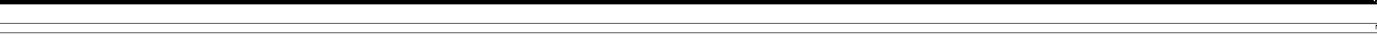

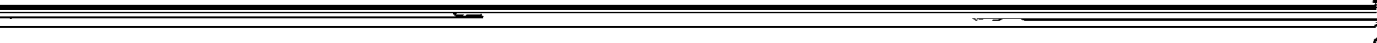






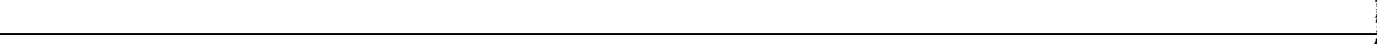


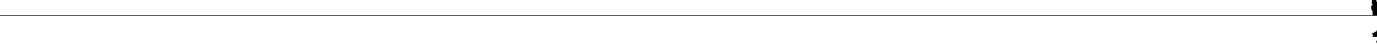





77. Suite 12 supports the Commission's proposal, at paragraph 49 of the Notice, that there be a one-calendar-day filing opportunity for initial LMDS applications. Suite 12 feels that such a procedure will help the Commission marshal the resources

^{70/}This percentage is derived by utilizing the GSA definition and construction benchmarks suggested herein, see, Section X.

necessary to process the applications promptly and will reduce the number of insincere applications. Furthermore, such a filing methodology will fit with either the use of post cards or letter-perfect applications.

XIV. SUITE 12 IS ENTITLED TO A LMDS PIONEER'S PREFERENCE IN LOS ANGELES NOTWITHSTANDING HYE CREST'S AUTHORIZATION TO PROVIDE A ONE-WAY VIDEO DISTRIBUTION SERVICE IN NEW YORK

78. The Commission tentatively denied Suite 12's request for a LMDS Pioneer's Preference in Los Angeles on the ground that LMDS is substantially similar to a service currently provided in New



surrender its New York authorization if Suite 12 wants a Pioneer's Preference in Los Angeles, ignores the commercial nature of the Hye Crest license.

**A. Hye Crest Was Licensed Prior To The Adoption Of The
Pioneer's Preference Rules**

80. Suite 12 is a general partnership which was established
in 1966 for the purpose of developing a new wireless video

experimental license to provide multiple channels of video programming to subscribers in and around New York City.^{73/}

82. After initial testing was completed, Hye Crest requested a waiver of the Commission's rules so that it could use 28 Ghz frequencies on a permanent basis to distribute video programming to apartments, hotels, and private residences throughout New York City. In January 1991, months before the Pioneer's Preference rules were adopted, the Commission granted Hye Crest's waiver request and issued a license permitting Hye Crest to provide 24 channels of video programming to residents in the Brighton Beach section of Brooklyn, New York.^{74/}

83. The Commission found that issuance of the Hye Crest license was in the public interest because it would bring a newer and more effective multichannel video service to the New York City market to compete with cable television and other video distribution services.^{75/} The Commission also found that authorization of the Hye Crest system would encourage significant competition to established cable television systems currently in the marketplace.^{76/}

^{73/} See file for Experimental Radio Station KA2XVG.

^{74/} See Hye Crest Order. Hye Crest subsequently requested and received modification of its authorization to offer 49 television channels of video programming utilizing the same 1000 Mhz of spectrum that it had originally been assigned. See File No. 10656-CF-MP-92.

^{75/} Hye Crest Order at 334.

^{76/} Id.

B. The Rules Proposed In This Proceeding Are An Outgrowth Of Work Commenced By Suite 12 After Hye Crest Was Authorized And The Pioneer's Preference Rules Were Adopted

84. After Hye Crest received its New York authorization, Suite 12 was encouraged by the Pioneer's Preference rules to explore new ways in which its patented 28 GHz technology could be used for other, more far-reaching applications. In the Spring of 1991, Suite 12 allocated significant resources to develop a regulatory and technical framework which would support a proposal to reallocate the 28 GHz band from point-to-point common carrier service to a new, two-way, point-to-multipoint voice, video, and data service.

85. Among other things, Suite 12 hired an outside research laboratory to conduct a comprehensive technical analysis of its 28 GHz technology. A large sum of money was spent to study all aspects of the Suite 12 system, including two-way communication links between a 28 GHz headend and dispersed subscriber locations. Suite 12 also retained legal counsel to assist in the analysis of policy issues and development of regulatory proposals which would support a reallocation of the 28 GHz band.

86. Also, in May of 1991, Suite 12 requested a new experimental license in the Los Angeles area so that it could further test its 28 GHz technology as a two-way voice and data transport system. In requesting the license, Suite 12 noted that its technology had

recently been expanded so that it could be utilized for interactive, digital data and telephony services.^{77/}

87. On September 23, 1991, Suite 12 submitted its Petition for Rulemaking and Petition for Pioneer's Preference in this proceeding. The Petition described numerous public benefits

its experimental license as a basis for the award of a pioneer's preference."^{81/}

C. The Commission's Decision To Require Suite 12 To Choose Between New York Or Los Angeles For Its LMDS Pioneer's Preference Is Based On The Erroneous Assumption That LMDS Is Not Substantially Different Than The Service Provided By Hye Crest In New York

89. The Commission has tentatively determined that Suite 12 deserves a Pioneer's Preference for its innovative 28 GHz technology and LMDS proposal. However, instead of granting Suite 12 a Pioneer's Preference in Los Angeles where it was requested, the Commission has proposed to modify the Hye Crest license to conform to the rules which are ultimately adopted in this proceeding. This proposal is based on the erroneous conclusion "that the service provided by Hye Crest in the New York City area is not substantially different from the service requested by Suite 12 for a pioneer's preference".^{82/}

1. The Service Provided By Hye Crest Is Substantially Different Than The Service For Which Suite 12 Seeks A Pioneer's Preference

90. In proposing to modify the Hye Crest license, the Commission is erroneously treating Suite 12's efforts to establish LMDS as the mere finishing touches to developmental efforts that

^{81/}Id. The Commission has found that in cases where a party has conducted experiments which lead to the award of a preference, it is "reasonable simply to use the area for which it receives an experimental license as a basis for a license in the authorized services." Report and Order, GEN Docket No. 90-217, released May 13, 1991 at ¶ 53.

^{82/} Notice at ¶ 64.

had started much earlier with Hye Crest. Hye Crest's license, is not an experimental, developmental or conditional authorization. Rather, it is a full-fledged commercial license which authorizes Hye Crest to provide one-way video distribution services in New York. Indeed, when the license was granted, the Commission specifically stated that "[d]evelopmental authority is not appropriate for Hye Crest which has conducted technical tests for two years and is now seeking authority for commercial applications of its service."^{83/}

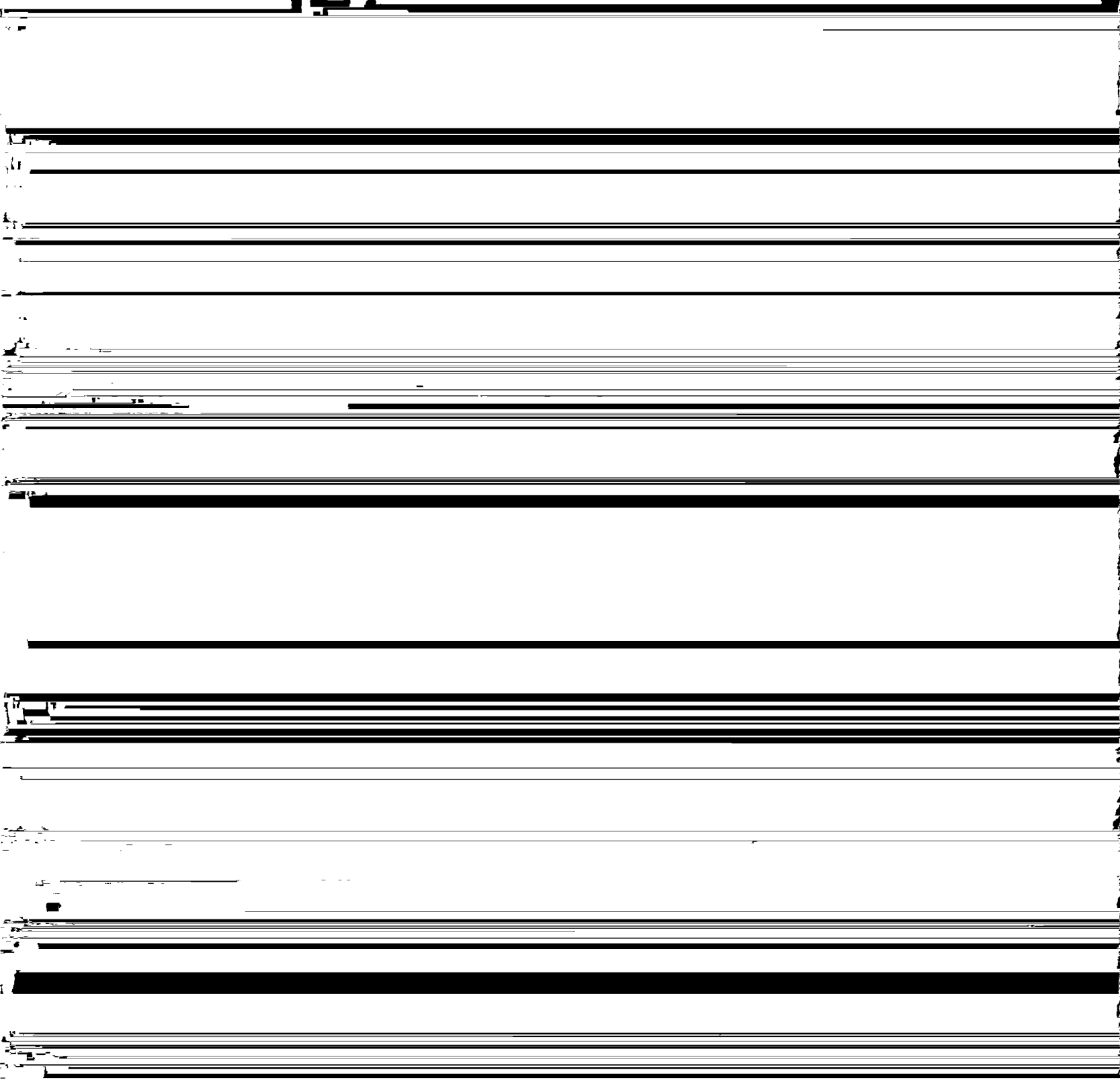
91. In approving the Hye Crest license, the Commission noted that it would "bring a new and needed multichannel video service to New York City."^{84/} Suite 12's proposal, on the other hand, went far beyond the mere delivery of one-way video signals in competition with cable television. LMDS involves a much broader, almost unlimited, array of two-way video, voice, and data services including HDTV, PCS, interactive television and more. Unlike the Hye Crest video service which involves just 49 channels, LMDS contemplates literally thousands of different "channels" providing an assortment of services.

92. LMDS is by no means a mere extension of one-way video service. Significantly, none of the equipment which is used for the Hye Crest system can be used for the two-way service envisioned for LMDS. Among other things, the operation of a LMDS system requires different modulators, oscillators and stability mechanisms

^{83/}Hye Crest Order at 335.

^{84/}Id. at 334.

and utilizes different antennas with dual polarization. Clearly, the Commission's conclusion that the services for which Suite 12 requests a preference are "not substantially different" than the



equipment and technology offered by Hye Crest are substantially different from LMDS. If the services, equipment and technology were not different, the Commission would not have awarded a LMDS preference to Suite 12.

96. The Pioneer's Preference rules require an innovator to propose either a new service or a technological innovation to substantially enhance an existing service.^{86/} Here, the Commission did not explain whether the preference was granted because LMDS is a substantial enhancement of an existing service or it is a new service in its own right.

97. If the Commission granted the preference because LMDS is a new service, how could the Commission ever conclude that LMDS is "not substantially different" from the Hye Crest service (or any existing service)? Alternatively, if the Commission granted the preference because LMDS is a substantial enhancement of an existing service (i.e., the Hye Crest service), the Commission has blatantly contradicted its assertion that the Hye Crest service is "not substantially different" from LMDS. Regardless of why the Commission granted Suite 12 a preference, the Commission's decision to reward Suite 12 with a LMDS preference, in and of itself, constitutes recognition that there is a great distinction between the services provided by Hye Crest and LMDS.

98. The Commission also acknowledged the distinction between the services provided by Hye Crest and LMDS when it denied 971 "me too" waivers that had been filed after the Hye Crest authorization

^{86/} See 47 C.F.R. § 1.402 (1992).

was granted. The Commission's rationale for dismissing these waivers, which it stated were similar to the Hye Crest waiver, was that they were essentially for services significantly less sweeping than LMDS. Specifically, the Commission stated:

[They]...are not structured to address the large amount of spectrum being allocated to individual licensees, nor the service area concept proposed herein, nor the technical parameters, yet to be developed. Instead, they seek waivers similar to that granted to Hye Crest Management.^{87/} (Emphasis added.)

99. In sum, the Commission's decision to grant Suite 12 an LMDS preference, in and of itself, demonstrates that the Hye Crest services are substantially different from those proposed for LMDS.

D. The Commission Must Allow Suite 12 To Have Its Pioneer's Preference in Los Angeles And Allow Hye Crest To Retain Its License

100. To properly reward Suite 12, the Commission must revise its tentative decision and award Suite 12 a LMDS Pioneer's Preference in Los Angeles without requiring Hye Crest to surrender its New York license. In reaching its decision, the Commission failed to consider the nature of Hye Crest's operations. Moreover, it failed to recognize that the services provided by the Hye Crest license are distinct from LMDS. As a result, the Commission is penalizing, rather than rewarding, Suite 12 for its innovative efforts.

^{87/} Notice at ¶ 51.

101. The Commission clearly did not consider the impact of its decision on Hye Crest's commercial operations. Hye Crest was granted a "regular," full-fledged license for three reasons: first, to ensure that the public has uninterrupted access to a new video outlet; second, to permit Hye Crest to amortize its construction and start-up costs; and third, to permit Hye Crest to raise the necessary capital to construct the New York system. In this regard, the Commission stated that:

[R]egular authority is necessary to ensure the public continued service, to permit [Hye Crest] to amortize its construction costs and start-up expenses sufficiently to lower subscription rates to competitive levels, and to attract the amount of venture capital needed....Under these circumstances developmental authority would be inappropriate.^{88/}

102. If the Hye Crest license is simply handed back to the Commission, the New York public will not receive "continued service" at 28 GHz; Hye Crest's "construction costs and start-up expenses" will not be fully amortized; those who contributed venture capital to the New York project relying upon the nature of the authorization would not have not been treated fairly nor in a manner that is consistent with the Hye Crest order.

103. The Commission is unreasonably interfering with Hye Crest's business by forcing it to either abandon or modify its existing operations. The Commission fails to recognize that,

^{88/}Hye Crest Order at 335.

although Hye Crest is affiliated with Suite 12, it is a separate and distinct legal entity established to provide a 28 GHz alternative to existing cable television services in New York.

104. Under the Commission's proposal, the only way that Hye


107. The Commission granted Suite 12 a preference because it proposed the LMDS rules and is the undisputed innovator of LMDS technology.^{91/} Suite 12's efforts, with respect to LMDS, occurred after the Commission granted the Hye Crest license and after the Commission adopted its preference rules. In advancing its proposal, Suite 12 undertook exactly the type of technological

Petition for Rulemaking constituted the requisite showing of LMDS's technical feasibility. The Commission cannot properly deny Suite 12's preference as requested. Such action would be arbitrary, capricious and an abuse of discretion under the Administrative Procedures Act. Moreover, it would establish a precedent that is inconsistent with the underlying intent of the pioneer's preference rules.

XV. CONCLUSION

WHEREFORE, Suite 12 respectfully requests the Commission to adopt rules in this proceeding consistent with the views expressed herein and grant it a Pioneer's Preference in Los Angeles without requiring Hye Crest to relinquish its license in New York.

Respectfully Submitted,
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EXHIBIT A

28 GHz Transceivers -- Exposure to RF Radiation

The transceivers are very low power and fall below the FCC Guideline for Human Exposure to Radiofrequency Radiation.*/

The maximum power density, S, is found using Equation (2) from OST Bulletin 65.*/

$$S = \frac{16nP}{\pi D^2}$$

where: S = maximum near-field power density
n = aperture efficiency
P = power fed to the antenna
D = antenna diameter

may be conservative a bandwidth of 665 KHz or data rate of

This value is conservative, most likely by a factor of 4 to 10; however, because the power will fall off rapidly with distance from the transmitter to levels safe for human exposure, we shall use it to insure that any calculated power uncertainty errs on the safe side.

Using Equation (3) of the OST Bulletin No. 65, the near field range for this situation lies within:

$$R \text{ (NF)} = \frac{0.6D^2}{\lambda}$$

where: $R \text{ (NF)}$ = distance to beginning of far-field
 D = antenna diameter
 λ = wavelength

Again, we will use $D = 12.7 \text{ cm}$. At 28 GHz, the wavelength is 1.06 cm and, accordingly, the new field is

$$R \text{ (Near Field)} = 30 \text{ cm.}$$

This means that the near field (Fresnel Region) extends out to only 30 cm., after which the far field (Fraunhofer Region) equations can be used to estimate the fall-off of RF power density with distance. This fall-off can be estimated using Equation (5) of Bulletin No. 65:

$$S = \frac{PG}{4\pi R^2}$$

where: S = power density (on axis)
 P = power fed to the antenna
 G = gain of the antenna (isotropic)
 R = distance to the point of interest

$$S = \frac{20 (251)}{4\pi (100 \text{ cm})^2} = .004 \text{ milliwatt/cm}^2$$

Both the near field and far field are well below the ANSI
 Radiation Guideline of 5 mw/cm².